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Attorney Docket No.: VRTY-001/00US

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Date of Deposit: July 11, 2005

EV525578779US

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of LATARCHE *et al.*

Serial No.: 09/851,640

Examiner: THAI, Hanh B.

Confirmation No.: 3606

Art Unit: 2161

Filed: May 8, 2001

For: **APPARATUS AND METHOD FOR PARAMETRIC GROUP  
PROCESSING**

**Mail Stop Appeal Brief-Patents**

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

**TRANSMITTAL - 37 C.F.R. § 41.37 APPEAL BRIEF**

Enclosed are the following documents for the above-identified application:

- ☒ Appeal Brief Under 37 C.F. R. § 41.37.
- ☒ A check in the amount of \$500.00 for the Appeal Brief fee is attached.
- ☒ Return receipt postcard.

The Commissioner is hereby authorized to charge any appropriate fees under 37 C.F.R. §§ 41.20(b) (2), 1.16, 1.17, and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 03-3117. This paper is submitted in duplicate.

Dated: 7/11/2005

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**37 C.F.R. § 41.37 APPEAL BRIEF**

Sir:

Applicants hereby appeal from the final rejections in an Official Action dated February 9, 2005 ("the Final Rejection"). In response, Applicants filed a Notice of Appeal on May 9, 2005. The subject application has been filed as part of a Request for Continued Examination ("RCE"). The TRANSMITTAL OF APPEAL BRIEF identifies payment of fees and any required petition for extension of time for filing this brief, if applicable.

**I. REAL PARTY IN INTEREST**

The real party in interest is Verity, Inc., which is the assignee of the above-identified application. The records of the U.S. Patent and Trademark Office validate that Verity, Inc. is the Assignee at Real/Frame 011790/0708.

**II. RELATED APPEALS AND INTERFERENCES**

There are no related appeals or interferences.

**III. STATUS OF CLAIMS**

In the Final Rejection, the Examiner rejected claims 1 to 22. During prosecution of the above-identified application, Applicants added claims 21 and 22 and amended claims 1, 3-6, 10, and 14-20. None of the twenty-two claims have been objected to or allowed at the time the Applicants filed the Notice of Appeal. Applicants now appeal claims 1 to 22, which are set forth in the Claims Appendix.

**IV. STATUS OF AMENDMENTS**

No amendments were filed subsequent to February 9, 2005, which is the mailing date of the Final Rejection that the Applicants now appeal.

**V. SUMMARY OF CLAIMED SUBJECT MATTER**

The claimed subject matter relates generally to techniques for identifying relevant documents stored within a computer environment, such as by using computerized techniques to implement a parametric index to effectuate parametric group processing. Notably, the parametric index can be used to expedite parametric searches of information, where parameter searches can identify documents containing items that are characterized by certain qualitative parameters or categorical attributes rather than by a numerical value, which is orderable. Examples of parametric searches include seeking items (e.g., cars) having a color (e.g., blue, green, red, black, white) and a car manufacture (e.g., Ford, BMW, Honda, Toyota) as categorical attributes, which are generally non-orderable. See generally, Specification, p. 1, paragraph [0003], lines 24-6; p. 4, paragraph [0018], lines 4-5; and FIG. 3. One of the several particularly

interesting results of at least one embodiment of the invention is that

[t]he invention allows parametric searches to be performed without the generation of SQL statements that need to be processed by a database. Consequently, sophisticated knowledge of the database architecture is not necessary. The parametric searches of the invention are relatively fast as they are directly processed in connection with a parametric index. Since the parametric index can be defined solely with fields and document identifications, it is relatively small. Therefore, the parametric index can be stored in primary memory, which facilitates rapid access and processing of the data within the parametric index.

See Specification, p. 2, paragraph [0008], lines 28-34 (emphasis added). Specifically, the claimed subject matter provides an improvement in performing parametric queries.

The use of a parametric index in accordance with the claimed subject matter stands in sharp contrast to prior art techniques of performing parametric queries, which require excessive time to access and process database information stored in secondary memory, especially in cases where conventional parametric searches use SQL statements and a database, such as a relational (or RDBMS) database. The use of SQL statements and a database is a relatively slow approach that cannot match the processing efficiencies associated with the direct parametric search against a parametric index as set forth in the claimed subject matter. That is, it is relatively time consuming to generate an SQL statement from parameters of a query, and then access a database stored in secondary memory. In addition, sophisticated knowledge of the database architecture and SQL is required in this prior art technique. While it is possible to articulate parametric queries as SQL statements, this approach is time consuming since parameters must be converted to SQL and then be applied to the database. In high-volume electronic commerce and marketplace applications, such as those commonly found on the Internet, it is not feasible to rely on a database to react in real time when hundreds of users are concurrently launching searches, each of which involves several fields or parameters. By contrast, the claimed subject matter is relatively fast since SQL statements do not have to be formed and the parametric index is relatively small, so it can be stored in primary memory to allow for rapid processing. Also, users need not have a knowledge of SQL statements to perform parametric queries. Another feature of the claimed subject matter is that text search results can be converted into a parametric group, facilitating subsequent parametric group processing. See e.g., Specification, p. 1, paragraph

[0003], line 27 to p. 2, paragraph [0003], line 4. See also, p. 5, paragraph [0025], lines 10-27.

As described in the above-identified application, parametric searching is improved by providing a parametric index to obviate the need to generate SQL statements and to access a database as a secondary memory. While the patent application describes various different embodiments for performing parametric searching using a parametric index, this Summary refers to FIG. 1 to illustrate one example of a computerized implementation for performing parametric index-based searching upon which independent claims 1, 10 and 14 read. For convenience, FIG. 1 is reproduced below.

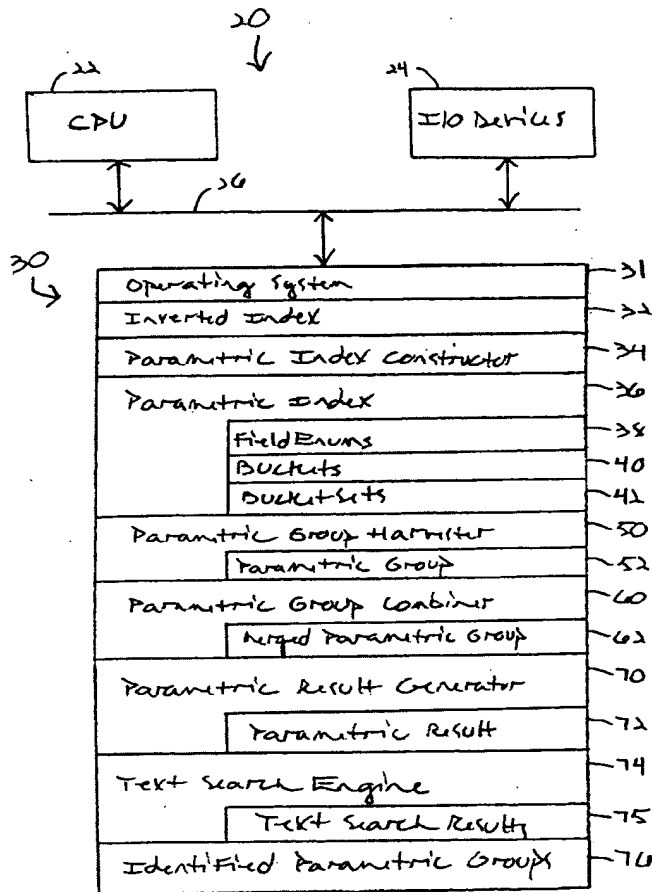


Fig. 1

While FIG. 1 depicts an apparatus 20 falling within the scope of the independent claims, the Applicants maintain that this figure does not exhaustively define the scope of the claimed subject matter as it is one of many various implementations. Apparatus 20 has several components, including a central processing unit ("CPU") 22 coupled via a system bus 26 to a

memory 30, which may be primary and/or secondary memory. Memory 30 stores a number of executable programs, many of which are known in the art, as well as a parametric index 36, which is an arrangement of data from an inverted index 32 that is organized according to qualitative parameters (i.e., categorical attributes). In some cases, parametric index 36 can include references, such as document identifications, to documents stored in one or more repositories (not shown) constituting a corpus of many documents. Since the documents themselves do not have to be included in parametric index 36, parametric index 36 can be relatively small, allowing it to be stored in primary memory and accessed without generating a parametric query in a structured query language, such as SQL. Storing the parametric index in primary memory (e.g., locally to CPU 22), such as in memory 30, facilitates rapid processing of parametric index information. See generally, Specification, p. 3, paragraph [0017], line 24 to p. 3, paragraph [0018], line 9.

Parametric index constructor 34 includes executable code to process inverted index 32 to form parametric index 36. For example, consider that parametric index constructor 34 uses an inverted index described in the Specification at p. 6, paragraph 28, lines 4-20 to form the example of a parametric index depicted in FIG. 3. Once the parametric index 36 is constructed, a query and/or sets of parametric groups may be processed in accordance with the claimed subject matter. Referring back to FIG. 1, parametric group harvester 50 can operate to specify one or more parametric groups 52 corresponding to one or more documents in subsets of documents. The Specification at p. 7, paragraph [0033], lines 14-18 indicates that the claimed subject matter reads on a parametric group that is defined as any subset of the parametric index, where the parametric group can be viewed as a cross product of two or more subsets of the parametric index.

A parametric group combiner 60 can be used to merge different parametric groups. For example, the parametric group combiner 60 includes executable code to merge a first parametric group with a second parametric group. As used in the above-identified application, the term "merge" refers to any logical operation performed between two or more parametric groups. Note that in some embodiments, different parametric groups can include existing parametric groups and/or one or more parametric groups generated from a text query. The parametric group combiner 60 produces a merged parametric group 62. A parametric result generator 70 produces a parametric result 72 from the merged parametric group 62. The parametric result generator 70

includes executable code to extract parametric result 70 by, for example, producing a list of documents identified within a parametric group. That is, the parametric result generator 70 maps a parametric group (e.g., the merged parametric group) to a set of documents corresponding to the parametric group. See generally, Specification, at p. 4, paragraphs [0020] to [0022], lines 14-31.

Other embodiments of the described technology are found throughout the specification and in the drawings. Further, those of skill in the art would recognize even other embodiments of this technology that fall within the scope of the claims. Again, independent claims 1, 10, and 14 are not to be limited to reading only on the apparatus of FIG. 1.

## **VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

- A.** Claims 1-22 are patentable under 35 U.S.C. §103(a) as the Examiner failed to establish a prima facie case of obviousness; no cited references either disclose or suggest identifying relevant documents without implementing parametric searches using a structured query language.
- B.** Claims 1-22 are patentable under 35 U.S.C. §103(a) as the cited references fail to teach or suggest identifying relevant documents without implementing parametric searches using a structured query language.
- C.** Claims 1-22 are patentable under 35 U.S.C. §103(a) as the cited references fail to teach or suggest merging parametric groups to produce a merged parametric group.
- D.** Claims 1-22 are patentable under 35 U.S.C. §103(a) as the Examiner failed to establish a prima facie case of obviousness; no cited references either disclose or suggest implementing cross-multiplication to derive subsets of elements that correspond to parametric groups.

## **VII. ARGUMENT**

The Examiner has finally rejected Independent claims 1, 10, and 14 and respective Dependent claims 2-9, 11-13, and 15-22 under 35 U.S.C. §103(a) as being unpatentable over

U.S. Patent No. 5,966,704 to Furegati et al. ("Furegati") in view of U.S. Publication No. US2001/0044758 A1 to Talib et al. ("Talib"). Applicants now appeal this Final Rejection for reasons that follow.

- A. Claims 1-22 are patentable under 35 U.S.C. §103(a) as the Examiner failed to establish a prima facie case of obviousness; no cited references either disclose or suggest identifying relevant documents without implementing parametric searches using a structured query language.**

To establish a prima facie case of obviousness, the Office Action must establish that all claim limitations are taught by at least one of the applied references. See MPEP § 2143.03. Further, MPEP § 2111.02 provides that a preamble of a claim is given the effect of a claim limitation where it breathes life and meaning into the claim. The Examiner neglected to address any of the amendments to the preambles of independent claims 1, 10 and 14 in the Applicant's October 12, 2004 Amendment. Therefore, the Examiner failed to establish that all claim elements have been either taught or suggested by Furegati and Talib, regardless of whether considered individually or collectively.

Independent claims 1, 10 and 14

The claimed subject matter set forth in claim 1, for example, is directed to "[a] method of parametric group processing to identify relevant documents without implementing parametric queries in a structured query language." As another example, consider that the claimed subject matter recited in claim 10 is directed to "[a] method of parametric group processing to identify relevant documents without implementing parametric queries in a structured query language." In yet another example, claim 14 recites "[a] computer readable medium for executing instructions by a central processing unit to identify relevant documents as identified in a primary memory local to said central processing unit." Nowhere in the Final Rejection does the Examiner put forth a sufficient basis to establish a prima facie case of obviousness for the foregoing claimed elements, especially in view of both the Furegati and Talib references. Accordingly, the 35 U.S.C. §103(a) rejection is improper, and as such, the Applicants request that it be withdrawn at least for these reasons.

Dependent claims 2-9, 11-13, and 15-22

Claims 2-9 and 21 depend from allowable independent claim 1 and thus are patentable for at least the same reasons. Claims 11-13 and 22, and claims 15-20 depend respectively from allowable independent claims 10 and 14 and thus are patentable for at least the same reasons. Therefore, withdrawal of the §103(a) rejection in connection with these claims is respectfully requested.

**B. Claims 1-22 are patentable under 35 U.S.C. §103(a) as the cited references fail to teach or suggest identifying relevant documents without implementing parametric searches using a structured query language.**

To establish a prima facie case of obviousness, the Office Action must establish that all claim limitations are taught by at least one of the applied references. See MPEP § 2143.03.

Independent claims 1, 10 and 14

Applicants submit that the combination of Furegati and Talib neither discloses nor suggests each of the elements set forth in claim 1. For example, claim 1 recites: “[a] method of parametric group processing to identify relevant documents without implementing parametric queries in a structured query language.” As such, a query language statement, such as a statement in structure query language (“SQL”), need not be used to perform a logical operation. At p. 5, paragraph [0025], lines 13-20, the Specification indicates that “the present invention is relatively fast since SQL statements do not have to be formed and the parametric index is relatively small, so it can be stored in primary memory, allowing for rapid processing.” (emphasis added).

By contrast, Furegati appears to require some kind of query language (generally synonymous with data manipulation language) to access storage. As an example, Furegati mandates at col. 4, lines 24-31: “[r]equired is a software layer between the application and the particular storage subsystem or subsystems where application data requests are dynamically translated into the appropriate Data Manipulation Language (DML) statements for the particular storage subsystem or subsystems such as, for example, Structured Query Language (SQL) for a RDBMS-based subsystem.” (emphasis added). See also col. 10, lines 7-11 (“[After a user

request is split into subqueries, the appropriate data manipulation statements are now created depending on data bases or files actually used and the subqueries are then submitted for execution. An example of a Data Manipulation Language (DML) is known as Structured Query Language (SQL).”). Further, FIG. 7B depicts a means for generating a set of search subrequests as data manipulation language statements (“DMLS”) for each storage media, and for each version of the particular storage segments in the time frame. A portion of FIG. 7B, which is reproduced as a convenience below, clearly shows that a query language operation (or DMLS) is used in every query of physical storage media.

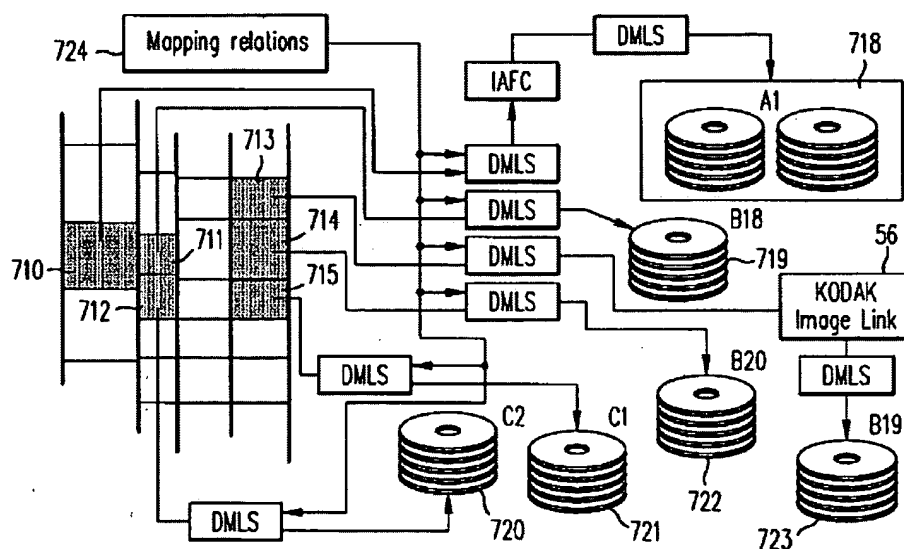


FIG. 7B

Therefore, Furegati seems to require using a query language when a query (or subquery) involves accessing any of Furegati’s index elements (i.e., parametric, contextual, or signal) of a storage segment. Consequently, Furegati cannot be said to teach or even suggest “[a] method of parametric group processing to identify relevant documents without implementing parametric queries in a structured query language.”

As for Talib, the Examiner cites paragraphs [0010], [0029], [0034], [0045], [0048], [0052], and [0158] for “using parametric search techniques that are based on the specification of values for attributes or parameters.” See Final Rejection, p. 3, lines 15-17. But the Examiner has not proffered any reason why those parametric search techniques are anything but those described above as conventional parametric search techniques (i.e., using query languages to

generate query language statements to access databases). Consequently, Talib cannot be said to teach or even suggest “[a] method of parametric group processing to identify relevant documents without implementing parametric queries in a structured query language,” as set forth in claim 1.

For at least similar reasons, Applicants also submit that both Furegati and Talib fail to disclose each of the elements set forth in claims 10 and 14. For example, Furegati and Talib appear to neither teach nor suggest the claimed combination of elements that includes performing parametric group processing to identify relevant documents without implementing parametric queries in a structured query language. As another example, Furegati and Talib seem to neither teach nor suggest performing parametric group processing to identify relevant documents identified in a primary memory local to a central processing unit. Consequently, Furegati and Talib each cannot be said to disclose “[a] method of parametric group processing to identify relevant documents without implementing parametric queries in a structured query language,” and “[a] computer readable medium for executing instructions by a central processing unit to identify relevant documents as identified in a primary memory local to said central processing unit,” as set forth in claims 10 and 14, respectively, of the subject application.

Dependent claims 2-9, 11-13, and 15-22

Claims 2-9 and 21 depend from allowable independent claim 1 and thus are patentable for at least the same reasons. Claims 11-13 and 22, and claims 15-20 depend respectively from allowable independent claims 10 and 14 and thus are patentable for at least the same reasons. Therefore, withdrawal of the §103(a) rejection in connection with these claims is respectfully requested

**C. Claims 1-22 are patentable under 35 U.S.C. §103(a) as the cited references fail to teach or suggest merging parametric groups to produce a merged parametric group.**

To establish a prima facie case of obviousness, the Office Action must establish that all claim limitations are taught by at least one of the applied references. See MPEP § 2143.03.

Independent claims 1, 10 and 14

Applicants submit that the combination of Furegati and Talib neither discloses nor suggests each of the elements set forth in claim 1. For example, consider the following recitation of “merging . . . said first parametric group and . . . said second parametric group to produce a

merged parametric group,” as set forth in claim 1. Applicants respectfully disagree with the Examiner’s assessment in the Final Rejection that Furegati teaches merging “contextual index elements” (as a first parametric group) and “signal index elements” (as a second parametric group) to produce a “storage segments” (as a merged parametric group). See Final Rejection, p. 3, lines 1-12.

Rather, Furegati teaches that “contextual index elements” are to remain separable and apart from “signal index elements,” and thus are not to be merged. The following corroborates this reasoning. First, Furegati teaches that “[t]he index elements are classified into a plurality of index classes.” See e.g., col. 3, lines 47-48 (emphasis added); and The Abstract. See also, Claim 1 of Furegati, third limitation (“[C]lassifying index elements into a plurality of index classes.”)(emphasis added). The term “classifying” is defined as “arranging or organizing into categories,” where each category is a group of items distinct (i.e., separate) from those items in other categories. Notably, the Specification at p. 4, paragraph [0021], lines 22-23 indicates that the term “merge” generally refers to any logical operation performed between two or more parametric groups. Hence, the term “classifying” of Furegati cannot be equated with the term “merging” of the claimed subject matter.

Second, although Furegati does teach that these and other index elements are to be separated, such as described at col. 6, lines 43-47 (“Indexes, for example, can be separated into different classes such as parametric index elements 25, contextual (full-text) index elements 26, and signals 27 (digitized voice as an example)”), Furegati fails to disclose or even hint at merging contextual index elements and signal index elements. Nor does Furegati suggest merging parametric index elements 25 with either of contextual index elements 26 or signal index elements 27. Rather, Furegati seems to teach only that the parametric index elements 25, contextual index elements 26 and signal index elements 27 of each information unit can respectively be mapped to index subsections 41 (“parametric index subsection”), 42 (“contextual index subsection”), and 43 (“signal index subsection”) for a corresponding storage segment, shown in FIG. 4A, which is reproduced below.

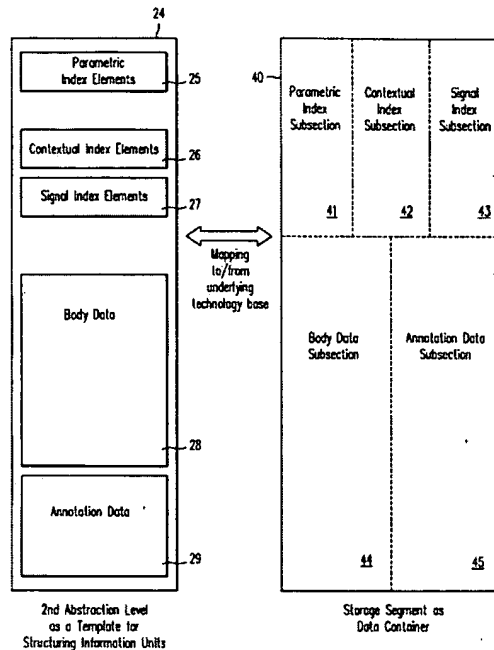


FIG. 4A

Third, Furegati discloses that “storage segments” are portions of a logical storage plane that “can be dealt with as containers each having a certain storage capacity and configuration, also referred to as storage segment structure.” See col. 5, lines 8-19; FIGs. 4A (“Storage Segment as Data Container”) and 4B. Furegati at most teaches that a storage segment is a data container or structure for separately storing data representing contextual index and signal index stored in subsections of the data container. These data containers are generally implemented in an underlying physical storage media technology. Nowhere does Furegati teach or suggest that these subsections (and its data representing contextual and signal indices) are merged within a data container to produce such a storage segment. As such, the storage segment cannot be said to be produced by merging these indexes.

By contrast, the “merged parametric group” of claim 1 of the subject application is produced by merging a “first parametric group” and a “second parametric group.” Consequently, Furegati cannot be said to teach or even hint at the claimed combination of “merging . . . said first parametric group and . . . said second parametric group to produce a merged parametric group,” as recited in claim 1.

As for Talib, the Examiner cites paragraphs [0010], [0029], [0034], [0045], [0048], [0052], and [0158] for “using parametric search techniques that are based on the specification of

values for attributes or parameters.” See Final Rejection, p. 3, lines 15-17. Again, the Examiner has not proffered any reason why those parametric search techniques are anything but those described above as conventional parametric search techniques (i.e., using query languages to generate query language statements to access databases). Consequently, Talib cannot be said to teach or even suggest the claimed elements set forth in claim 1.

For at least the foregoing reasons, Applicants respectfully submit that claim 1 is now in condition for allowance. For at least similar reasons, Applicants also submit that Furegati and Talib appear to neither teach nor suggest the claimed combination of elements set forth in claims 10 and 14. For example, the combination of Furegati and Talib appears to neither teach nor suggest producing a merged parametric group by using a first parametric group and a second parametric group as does the claimed invention. Consequently, the combination of Furegati and Talib cannot be said to disclose “merging . . . said first parametric group with . . . a second parametric group . . . to produce a merged parametric group,” and “a fourth set of instructions to combine said first parametric group with said second parametric group to produce a merged parametric group,” as set forth in claims 10 and 14, respectively, of the subject application.

Accordingly, Applicants respectfully submit that claims 10 and 14 are now in condition for allowance. Claims 11-13 and 22, and claims 15-20 depend from allowable independent claims 10 and 14, respectively, and thus are patentable for at least the same reasons. Therefore, withdrawal of the §103(a) rejection in connection with these claims is proper.

Dependent claims 2-9, 11-13, and 15-22

Claims 2-9 and 21 depend from allowable independent claim 1 and thus are patentable for at least the same reasons. Claims 11-13 and 22, and claims 15-20 depend respectively from allowable independent claims 10 and 14 and thus are patentable for at least the same reasons. Therefore, withdrawal of the §103(a) rejection in connection with these claims is respectfully requested.

- D. Claims 1-22 are patentable under 35 U.S.C. §103(a) as the Examiner failed to establish a prima facie case of obviousness; no cited references either disclose or suggest implementing cross-multiplication to derive subsets of elements that correspond to parametric groups.**

To recapitulate, the Examiner must establish a prima facie case of obviousness by establishing that all claim limitations are taught by at least one of the applied references. See MPEP § 2143.03. Again, the Examiner neglected to address any of the amendments to include deriving subsets of elements (e.g., as subsets of document identifiers, items, buckets, etc.) by cross-multiplication as set forth in independent claims 1, 10 and 14 in the Applicant's October 12, 2004 Amendment. Therefore, the Examiner failed to establish that all claim limitations have been either taught or suggested by Furegati and Talib, regardless of whether these references are considered individually or collectively.

Independent claims 1, 10 and 14

The claimed subject matter set forth in claim 1, for example, is directed to "specifying a first parametric group corresponding to a first subset of elements . . . derivable by cross-multiplying . . . categorical attributes . . ." and "specifying a second parametric group corresponding to a second subset of elements . . . derivable by cross-multiplying . . . categorical attributes . . ." As another example, consider that the claimed subject matter recited in claim 10 is directed to "a first parametric group . . . corresponding to a first subset of elements . . . derivable by cross-multiplying . . . categorical attributes . . ." In yet another example, claim 14 recites "a second set of instructions to specify a first parametric group corresponding to a first subset of elements . . . derivable by cross-multiplying . . . categorical attributes . . ." and "a third set of instructions to specify a second parametric group corresponding to a second subset of elements . . . derivable by cross-multiplying . . . categorical attributes . . ." Nowhere in the Final Rejection does the Examiner put forth a sufficient basis to establish a prima facie case of obviousness for the foregoing claimed elements, especially in view of both the Furegati and Talib references, whether examined individually or collectively. Accordingly, the 35 U.S.C. §103(a) rejection is improper, and as such, the Applicants request that it be withdrawn at least for these reasons.

Dependent claims 2-9, 11-13, and 15-22

Claims 2-9 and 21 depend from allowable independent claim 1 and thus are patentable for at least the same reasons. Claims 11-13 and 22, and claims 15-20 depend respectively from allowable independent claims 10 and 14 and thus are patentable for at least the same reasons. Therefore, withdrawal of the §103(a) rejection in connection with these claims is respectfully requested.

**CONCLUSION**

For the reasons set forth above, Applicants as Appellants in this matter traverse the aforementioned rejections of claims 1-22 on the grounds that the cited references, either alone or in combination, do not teach or suggest the claimed combinations of elements; and that the Examiner has failed to establish prima facie cases of obviousness. All rejections against claim 1-22 are improper. Appellants request withdrawal of these rejections and an indication of allowability for claims 1-22.

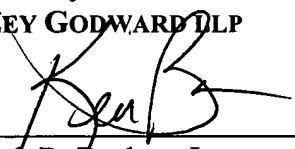
One copy of this Appeal Brief is provided along with payment of the required fee.

Respectfully submitted,  
COOLEY GODWARD LLP

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11 JUL 2005

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## VIII. CLAIMS APPENDIX

1. A method of parametric group processing to identify relevant documents without implementing parametric queries in a structured query language, the method comprising:

forming a parametric index from an indexed database by arranging categorical attributes as fields of said parametric index, each of said categorical attributes referencing any number of elements where said categorical attributes are qualitative parameters;

specifying a first parametric group corresponding to a first subset of elements in said parametric index, said first subset derivable by cross-multiplying a set of one or more categorical attributes from a first field with another set of one or more categorical attributes from a second field;

identifying text including at least one categorical attribute;

specifying a second parametric group corresponding to a second subset of elements in said parametric index, said second subset derivable by cross-multiplying a set of said at least one categorical attribute from either said first field or said second field with another set of one or more categorical attributes from said first field, said second field or any other field;

merging said first subset of elements of said first parametric group and said second subset of elements of said second parametric group to produce a merged parametric group; and

extracting a parametric result from said merged parametric group,

wherein said parametric result specifies a set of documents as identified by said first and said second subsets of elements.

2. The method of claim 1 wherein specifying includes listing a parametric group, and identifying said text further comprises receiving a query.

3. The method of claim 1 wherein identifying said text further comprises receiving text search results, and specifying includes deriving said second parametric group from said text search results.

4. The method of claim 3 wherein specifying includes mapping said text search results into said parametric index to identify a parametric group for subsequent parametric group processing to identify other documents.
5. The method of claim 1 further comprising identifying said fields as BucketSets, said first and said second subsets of elements as Buckets, said categorical attributes as FieldEnums and said elements as including document identifications.
6. The method of claim 1 further comprising storing said parametric index in a primary memory local to a central processing unit.
7. The method of claim 1 wherein said merging includes taking the union of said first parametric group and said second parametric group to produce said merged parametric group.
8. The method of claim 1 wherein extracting includes collecting document identifications for said merged parametric group.
9. The method of claim 8 further comprising forming the union of said document identifications to produce said parametric result.
10. A method of parametric group processing to identify relevant documents without implementing parametric queries in a structured query language, the method comprising:
  - performing a text search to produce text search results including at least one categorical attribute;
  - mapping said text search results into a parametric index to identify a first parametric group, said parametric index including categorical attributes arranged as fields of said parametric index, each of said categorical attributes referencing any number of elements where said categorical attributes are qualitative parameters, said first parametric group corresponding to a first subset of elements in said parametric index, said first subset derivable by cross-multiplying a set of at least said one categorical attribute that corresponds to at least one field with another set of one or more categorical attributes from said at least one field or any other field;

merging said first subset of elements of said first parametric group with a second subset of elements corresponding to a second parametric group in said parametric index to produce a merged parametric group; and

extracting a parametric result from said merged parametric group, wherein said parametric result specifies a set of documents based on said first subset of elements and said second subset of elements.

11. The method of claim 10 wherein said merging includes taking the union of said first parametric group and said second parametric group to produce said merged parametric group.

12. The method of claim 10 wherein extracting includes collecting document identifications for said merged parametric group.

13. The method of claim 12 further comprising forming the union of said document identifications to produce said parametric result.

14. A computer readable medium for executing instructions by a central processing unit to identify relevant document identifications in a primary memory local to said central processing unit, the computer readable medium comprising:

a first set of instructions to form a parametric index from an indexed database by arranging categorical attributes as fields of said parametric index, each of said categorical attributes referencing any number subset of elements where said categorical attributes are qualitative parameters;

a second set of instructions to specify a first parametric group corresponding to a first subset of elements in said parametric index, said first subset derivable by cross-multiplying a set of one or more categorical attributes from a first field with another set of one or more categorical attributes from a second field;

a third set of instructions to specify a second parametric group corresponding to a second subset of elements in said parametric index, said second subset derivable by cross-multiplying a set of at least one categorical attribute from either said first field or said second field with

another set of one or more categorical attributes from said first field, said second field or any other field;

a fourth set of instructions to combine said first parametric group said second parametric group to produce a merged parametric group; and

a fifth set of instructions to extract a parametric result from said merged parametric group, wherein said parametric result specifies a set of documents, said fifth set of instructions being independent of a query language.

15. The computer readable medium of claim 14 wherein said second set of instructions facilitate the listing of said first parametric group and said second parametric group.

16. The computer readable medium of claim 14 including instructions to derive said second parametric group from text search results.

17. The computer readable medium of claim 16 including instructions to map said text search results into said parametric index to identify a parametric group for subsequent parametric group processing to identify other documents.

18. The computer readable medium of claim 14 wherein said fourth set of instructions take the union of said first parametric group and said second parametric group to produce said merged parametric group.

19. The computer readable medium of claim 14 wherein said fifth set of instructions collect document identifications for said merged parametric group.

20. The computer readable medium of claim 19 wherein said fifth set of instructions form a union between said document identifications to produce said parametric result.

21. The method of claim 1 wherein merging further comprises performing a logical operation that is independent of a query language.

22. The method of claim 10 wherein merging further comprises performing a logical operation that is independent of a query language.

**IX. EVIDENCE APPENDIX**

No materials.

**X. RELATED PROCEEDINGS APPENDIX**

No materials.